Billing Code: 4520-43-P

DEPARTMENT OF LABOR

Mine Safety and Health Administration

Petitions for Modification of Application of Existing Mandatory Safety Standards

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Notice.

SUMMARY: Section 101(c) of the Federal Mine Safety and Health Act of 1977 and Title 30 of the Code of Federal Regulations Part 44 govern the application, processing, and disposition of petitions for modification. This notice is a summary of petitions for modification submitted to the Mine Safety and Health Administration (MSHA) by the parties listed below.

DATES: All comments on the petitions must be received by MSHA's Office of Standards, Regulations, and Variances on or before [INSERT DATE 30 DAYS FROM THE DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit your comments, identified by "docket number" on the subject line, by any of the following methods:

- 1. <u>Electronic Mail:</u> zzMSHA-comments@dol.gov. Include the docket number of the petition in the subject line of the message.
 - 2. Facsimile: 202-693-9441.
- 3. <u>Regular Mail or Hand Delivery</u>: MSHA, Office of Standards, Regulations, and Variances, 201 12th Street South, Suite 4E401, Arlington, Virginia 22202-5452,

Attention: Sheila McConnell, Director, Office of Standards, Regulations, and Variances. Persons delivering documents are required to check in at the receptionist's desk in Suite 4E401. Individuals may inspect copies of the petitions and comments during normal business hours at the address listed above.

MSHA will consider only comments postmarked by the U.S. Postal Service or proof of delivery from another delivery service such as UPS or Federal Express on or before the deadline for comments.

FOR FURTHER INFORMATION CONTACT: Barbara Barron, Office of Standards, Regulations, and Variances at 202-693-9447 (Voice), barron.barbara@dol.gov (E-mail), or 202-693-9441 (Facsimile). [These are not toll-free numbers.]

SUPPLEMENTARY INFORMATION:

I. Background

Section 101(c) of the Federal Mine Safety and Health Act of 1977 (Mine Act) allows the mine operator or representative of miners to file a petition to modify the application of any mandatory safety standard to a coal or other mine if the Secretary of Labor determines that:

- 1. An alternative method of achieving the result of such standard exists which will at all times guarantee no less than the same measure of protection afforded the miners of such mine by such standard; or
- 2. That the application of such standard to such mine will result in a diminution of safety to the miners in such mine.

In addition, the regulations at 30 CFR 44.10 and 44.11 establish the requirements and procedures for filing petitions for modification.

II. Petitions for Modification

Docket Number: M-2016-006-M.

<u>Petitioner</u>: Coeur Alaska, Inc., 1700 Lincoln Street, Suite 4700, Denver, Colorado 80203.

Mine: Kensington Mine, MSHA I.D. No. 50-01544, located in Juneau County, Alaska Regulation Affected: 30 CFR 57.11050 (Escapeways and refuges).

<u>Modification Request</u>: The petitioner requests relief from the existing standard insofar as it applies to the development and exploration areas of the Kensington Mine. The petitioner states that:

- (1) Coeur Alaska owns and operates the Kensington Mine, which is an underground gold mine located in Juneau County, Alaska. Kensington utilizes both transverse and longitudinal long-hole stoping. In both methods, a single development drift is driven through waste rock adjacent to the ore body. When this drift reaches planned elevation, level accesses are developed to provide entry points to the ore body for exploration and later ore production. Once the level development and exploration are completed at a planned elevation, the ore is extracted either perpendicular (transverse stoping) or parallel to the strike of the ore (longitudinal stoping).
- (2) Coeur Alaska seeks a modification stating that during the exploration or development of an ore body within the mine, in order to comply with 30 CFR 57.11050(a), Coeur will not be required to continuously reposition a portable emergency refuge chamber ("refuge") on the lowest decline within the mine or to continuously reposition the refuge to remain within 1,000 feet from the face of a development drift.

- (3) Coeur Alaska seeks relief because Kensington already has secondary escapeways constructed to the lowest level of the mine, and is constructing and planning to develop additional secondary escapeways to future levels of the mine. Kensington's existing permanent refuge chamber already complies with the 30-minute travel time to a refuge chamber required by § 57.11050(b). Training miners to rely on portable refuges that will change locations on frequent basis will result in a diminution of safety to the miners affected.
- (4) Installing and relocating refuge chambers to remain within 1,000 feet of each development drift face would subject miners to greater hazards than they are subjected to under current conditions. Like any underground mine, Kensington's underground operations take place in a dynamic environment, and its exploration and development areas are dominated by self-propelled mobile equipment and blasting activities. At desired development rates, Kensington typically advances its faces in development drifts twice per day, with each advance being a 12-foot length. If the portable emergency refuge chambers ('refuge'') were positioned at the safest distance away from the face while still being in compliance with MSHA's newly proposed 1,000 distance requirement, the refuge would have to be relocated twice each day (following each of the two advances) just to remain within that lateral boundary each time the face is advanced, or the Mine will be out of compliance.

In order to reduce the number of relocations to less than one per day, the refuge will need to be positioned well within the 1,000 foot range. If Coeur places the refuge at 50 percent of the maximum allowable distance at the beginning of a development cycle (e.g. 500 feet from the face of a development drift), the refuge could remain in one place

for a maximum of 21 days at typical development rates. However, during that 21-day cycle, the refuge will be repeatedly subjected to severe blast damage. The concussive forces from face blasts can be devastating at 500 feet. Over the course of 21 days blasting, the refuge would be exposed to 42 blasts. Accordingly, placing the refuge will inside of the 1,000 foot boundary increases the likelihood of mechanical damage to the refuge chamber. Moreover, Kensington only blasts during shift change, when the mine is completely evacuated, save one miner in the designated safe zone. No miners will be anywhere near the refuge chamber during blasting, or in a position to inspect the refuge chamber before the next shift arrives. Thus, any blast damage suffered by the refuge chamber will not be discovered until Coeur's miners arrive and inspect the chamber, exposing them to a greater risk of harm if use of the refuge chamber were necessary upon their arrival.

Not only is the structural integrity of the refuge chamber at risk if it is habitually located near the blasting activities, if the refuge chambers are require to "follow" the face in a development drift on the lowest level of the mine, the physical locations of these refuge chambers will be continually changing. This means that miners will not have reliable, fixed locations to which they can travel in an emergency. Instead, they will be searching for a moving target. The added difficulty for miners and mine rescue teams to know with certainty the exact location of each mine refuge chamber is more hazardous than a situation where each refuge chamber's location is fixed, will-known and depicted on historical and current versions the mines' map.

Because of Kensington's remote location, miners work long rotations and are away from site on Rest & Relaxation ("R&R") for long periods of time. If refuge

chambers must be moved as MSHA appears to require, it is highly likely that a miner could go home on R&R and return to a different refuge chamber location every rotation. The shifting locations will require each miner to continuously remember the current locations for the refuge chambers in his vicinity, as opposed to constant emergency egress routes that are more likely to be remembered during an emergency. This will undoubtedly lead to less familiarity with the location of the facilities and in times of an emergency people need to be "programmed" as to mitigate the risk of responding incorrectly. Not only will uncertainty arise from the change in physical location for the refuge chamber, but the maps and signs inside Kensington might have to be updated as well. To the extent there are more signs and maps than refuge chambers, the risk will increase that one or more of the maps or signs will not be updated to reflect a future change of location. This error could have a catastrophic effect for miners going to a location they believe has a chamber based on an obsolete map only to find that it had moved.

In addition, in the event of a mine accident, mine rescue teams will need to validate that the location of each refuge chamber in which injured miners might be located, was in fact the current location of each refuge chamber in which injured miners might be located, was in fact the current location for that chamber. This uncertainty will complicate if not delay rescue efforts.

Not only does MSHA's requirement that a refuge chamber be tethered to the location of the development drift's face add uncertainty regarding the chambers precise location, the movement of that chamber deeper into the mine increases the risk for miners working in the area in between the lowest level and the development and exploration

activities. For example, miners on the 405 and 330 Level Access areas have a shorter travel time to reach the portable refuge installed on the 255 Decline than secondary escapeways at the 480 Level.

As the 255 Decline face advances towards the planned 255 Level, if the portable emergency refuge chamber must follow along 1,000 feet behind the decline face, the travel time and distance to that portable refuge will be increasing for the miners on the 405 and 330 Level Access areas. Also, miners are trained first to try and evacuate the mine through the portal if possible, as opposed to going deeper into the mine if there is an emergency. If there is thick smoke in the mine, and the miners don their self-rescue breathing devices, they are trained to seek the nearest refuge. Not only does the movement of the portable emergency refuge chamber result in longer travel times for these miners, they are moving further underground and farther away from the escapeway, and trying to find a moving target in thick smoke.

If MSHA's purported rationale for having the portable refuge within 1,000 feet of the face in the development and exploration area is that this area is the most likely source of hazards for miners, the miners on the 405 and 330 Levels who are traveling to the refuge are moving towards the likely source of hazards, not away from it. Hence, the frequent relocating of the portable emergency refuge chamber adds a greater risk of physical damage to the refuge and a greater level of uncertainty and risk for the mines working underground who need to navigate to the refuge. Conversely, keeping refuge chambers in fixed locations, compliant with the standard's travel time requirement, simplifies the miners' egress plans, which increases the probability of proper execution of these egress plans, and does not detract from their safety.

(10) The proposed action by Coeur would provide no lesser degree of safety than application of the § 57.11050. Another basis for permitting modification of the standard's application is that Coeur's proposed alternative method provides at least the same measure of safety contemplated by the standard.

Repeated movement of the refuge puts miners at risk for several reasons. First, damage to the refuge will put miners at risk as the refuge may not function as intended. Second, the potential to damage the refuge chambers increases significantly while they are being move. Third, the portable refuge chambers cannot simply be parked on the decline because of their size, they would block assess between the development drift face and the escapeways. To allow for the decline to remain clear, a cutout into the rib must be made to park the refuge chamber. Fourth, the refuge chambers are not available for use while being moved (and air and water are being reconnected), meaning that Kensington risks non-compliance with § 5711010 each time it is attempting to comply with MSHA's directive to reposition the refuge to remain within 1,000 feet of the face.

Taken to its logical conclusion, to ensure compliance, Kensington would be forced to have two refuges in place, and "leapfrog" them during exploration and development. However, the spacing and cost associated with that approach are untenable.

Each refuge chamber is roughly 15 feet long, and requires a cutout that is 30 feet deep. The development costs at Kensington are approximately \$1500 per foot, meaning that each 30-foot cutout will cost \$45,000 to create. Installing air, water and shotcrete will be in addition to the \$45,000 figure. Moving the unit will take 2 miners approximately 12 hours, at a labor cost of \$1136. In total, the average cost to relocate a

portable refuge one time is almost \$50,000. Assuming Kensington positioned the refuge

at a distance that was 50 percent of the stated requirement, so that relocations were only

required every ten days, the resulting 36 relocations per year will cost approximately \$1.8

million for the 255 Decline alone.

For these reasons, not only does MSHA's current interpretation of 30 CFR

57.11050 add a new requirement to the standard without undergoing the rulemaking

process, the interpretation will result in a diminution of safety to the miners at

Kensington Mine. There is no peer-reviewed empirical data to support this additional

requirement, and the plain language of 30 CFR 57.11050 does not support the

requirement either.

The petitioner asserts that the proposed alternative method will provide the same

or greater measure of safety as would be provided by application of the existing standard.

Sheila McConnell

Director,

Office of Standards, Regulations, and Variances

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